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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,529	09/28/2006	Tetsuya Otsaka	SH-0069PCTUS	4646
21254 7590 10/13/2010 MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			EXAMINER DEGHAN, QUEENIE S	
			ART UNIT 1741	PAPER NUMBER
			MAIL DATE 10/13/2010	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/594,529	<b>Applicant(s)</b> OTOSAKA, TETSUYA	
	<b>Examiner</b> QUEENIE DEGHAN	<b>Art Unit</b> 1741	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 7, and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Wada et al. (2002/0162363). Wada discloses a manufacturing apparatus capable of depositing glass particles onto a starting member placed vertically to form a porous glass base material, wherein a plurality of gas inlets is provided in one or more lateral walls of a process chamber including a burner for the deposition therein, and wherein two or more of the plurality of gas inlets are provided both in upper portions of a lateral wall and along a ceiling of the process chamber, as can be seen as items 15 in figure 7b ([0002], [0004]-[0005]).

3. Regarding claim 2, at least two gas inlets (15) are provided on a lateral wall that have an opposing lateral wall (around 12) with the porous glass base material positioned there between (figure 7a).

4. Regarding claim 3, the apparatus also comprises slit-like gas inlets (15) along the left and right edges of a lateral wall on which the burner is provided (figure 7a).

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5. Regarding claims 7 and 13-14, the ceiling and lateral walls of the process chamber along which a gas supplied from the gas inlets flows are formed by flat surfaces (figure 7a).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4-5, 8-9 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wada et al. (2002/0162363), as applied to claims 1-3 above, in view of Nakamura et al. (2003/0015004).

8. Regarding claims 4, 5, 8 and 9, Wada teaches an exhaust that is located opposite the burner, but not necessary on an opposing lateral wall. Nakamura discloses a similar apparatus for manufacturing porous glass base material comprising a gas inlet on the upper portion of a lateral wall and a burner on the lateral wall (fig 1, 2, 6 & 8, [0006], [0031]-[0032], [0034]-[0035]). Nakamura also discloses an exhaust outlet (10, 11) in a lateral wall with a smaller width than the wall with the gas inlets and also opposing the lateral wall provided with the burner (figure 2,3, 4a, 4b, 7 [0027], [0030]). It would have been obvious to one of ordinary skill in the art at the time of the invention to have alternatively provide for an exhaust outlet located on a lateral wall with a smaller width opposing the wall on which the burner is located as Nakamura suggested, as the

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location and smaller width provides for the smooth and natural flow of the exhaustion of undeposited glass particles.

9. Regarding claims 15 and 16, Wada discloses the ceiling and lateral walls of the process chamber along which a gas supplied from the gas inlets flows are formed by flat surfaces (figure 7a).

10. Claims 6, 10-12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wada et al. (2002/0162363), as applied to claims 1, 2, 3 above, in view of Nakamura et al. (2003/0015004), as applied to claim 4 above, and in further view of Ishihara (2004/0134236). Wada and Nakamura fail to disclose a gas inlet provided in a lateral wall in which the exhaust outlet is provided. Ishihara teaches a process chamber comprising a burner on one lateral wall and an exhaust outlet on an opposing lateral wall, wherein a gas inlet (15) is provided in the lateral wall in which the exhaust outlet is provided (figure 1, [0022], [0025]). Furthermore, according to figure 1, Ishihara discloses the distance between the lowest part of the gas inlet is more than 30mm from the highest part of the exhaust outlet, as can be seen when compared to the respective lengths of the core rod (400mm) and traverse length of the starting rod (1000mm) ([0027]). It would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized an additional gas inlet on the lateral wall on which the exhaust outlet is provided in the apparatus of Wada and Nakamura in order to provide a positive pressure in the process chamber for minimizing contamination of impurities.

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11. Regarding claim 17, Wada discloses the ceiling and lateral walls of the process chamber along which a gas supplied from the gas inlets flows are formed by flat surfaces (figure 7a).

***Response to Arguments***

12. Applicant's arguments with respect to Nakamura have been considered but are moot in view of the new ground(s) of rejection.

13. Furthermore, the applicant briefly argues the secondary references of Kuwabara and Ishihara by alleging there is not motivation or suggestion to combine the references. The applicant has not provided any supportive or factual findings to support this argument. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Clearly, the pair of gas inlets numbered 13 and the gas inlet 9 makes up a plurality of gas inlets.

14. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to QUEENIE DEGHAN whose telephone number is (571)272-8209. The examiner can normally be reached on Monday through Friday 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Daniels can be reached on 571-272-2450. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Queenie Dehghan/

Examiner, Art Unit 1741